EXHIBIT L

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Exhibit 033-3
Invalidity Claim Chart for U.S. Patent No. 10,779,033 ("the '033 patent")

YouTube Remote and YouTube Leanback ("YouTube Remote"), including the YouTube Remote application ("the YT Remote System") was described in a printed publication, or in public use, on sale, sold, known in this country, or otherwise available to the public before the priority date of the '033 patent. For example, the YouTube Remote was available a no later than November 9, 2010. https://www.eweek.com/it-management/youtube-remote-comes-to-android-market-for-leanback/ ("Google Nov. 9 launched YouTube Remote to let U.S. users control the YouTube Leanback application from their Android smartphones…. Available in the Android Market now"). Features of the YouTube Remote would have been apparent to a person of ordinary skill in the art using the public systems, rendering the systems themselves § 102(a), (b) and (g) prior art.

At least the following documents describe the functionality of the YT Remote System:

- [1] https://youtube.googleblog.com/2010/11/control-youtube-on-desktop-or-tv-with.html, By Kuan Yong, Senior Product Manager, Nov.09.2010
- [2] https://www.youtube.com/watch?v=txIPVu6yngQ, posted Nov 9, 2010
- [3] "Remote Screen pairing – implementation"
- [4] https://www.youtube.com/watch?v=EGdsOslqG2s, Nov 14, 2010
- [5] https://lifehacker.com/remote-control-youtube-on-your-tv-or-computer-from-your-5685752 , Nov 9, 2010
- [6] YouTube Lounge Youbiquity Presentation
- [7] MDx protocol as of 2011, as evidenced by MDx Protocol v2 (12/21/11 at 8:06am)
- [8] US 9,490,998
- [9] https://web.archive.org/web/20111014181427/https://market.android.com/details?id=com.google.android.ytremote
- [10] https://palblog.fxpal.com/?p=4953, Lean back with YouTube and Android by Surendar Chandra, November 11, 2010 (available at https://web.archive.org/web/20111106221315/https://palblog.fxpal.com/?p=4953)
- [11] Engadget Article, YouTube Remote app released, controls Leanback on GTV or PC from your Android phone, November 9, 2010

Google also relies on Google source code, both server-side code and device-side code, including any written source code, source code in production, and released source code, including the exemplary code paths referred to below. Google expressly reserves the right to rely on additional source code at a later time.[1]

[1] Google has made available for inspection and cited in this charts versions of the source code for the YouTube remote that predate the December 30, 2011 priority date that Sonos identified in its invalidity contentions. Google is also making available for inspection earlier versions of the code from July 12, 2011, including Version 1 of the LeanBack code and its corresponding application and server code, that predate Sonos's

Google identifies the authors, designers and implementers of the documents and source code identified and cited herein as prior inventors for purposes of Section 102(g), including but not limited to Ramona Bobohalma.

To the extent publicly available, these documents themselves are also each individually prior art under § 102(a), (b) or (e) and § 103 based on their dates of publication and public availability.

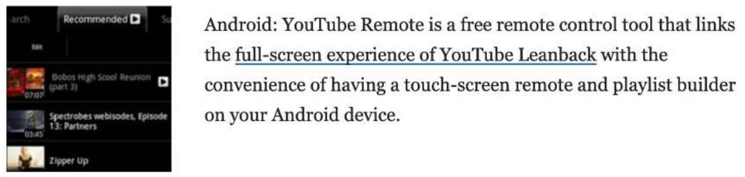
To the extent it is argued the YT Remote System does not disclose any element, that element would be obvious based on the state of the art and/or in combination with one or more of the references noted in Riders I-K.

To avoid duplication and cumulative excerpts, exemplary quotations and citations are provided. The citations to portions of any reference in this chart are exemplary only. Google reserves the right to use the entirety of any reference cited in this chart to show that the asserted claims are anticipated and/or obvious, or to show the state of the art at the relevant time. References to figures should be understood to also refer to any accompanying text. Additional support can be found elsewhere in the prior art reference, and Google expressly reserves the right to rely on such other support and passages at a later time. The use of claim terms in the below chart is based on Sonos' construction of claim terms in its infringement contentions as understood by Google, as well as the plain and ordinary meaning of the claim terms. This chart should not be construed as consenting to or agreeing with Sonos' construction of claim terms. Because discovery is ongoing, Google reserves all rights to amend its invalidity contentions based on new information produced in discovery.

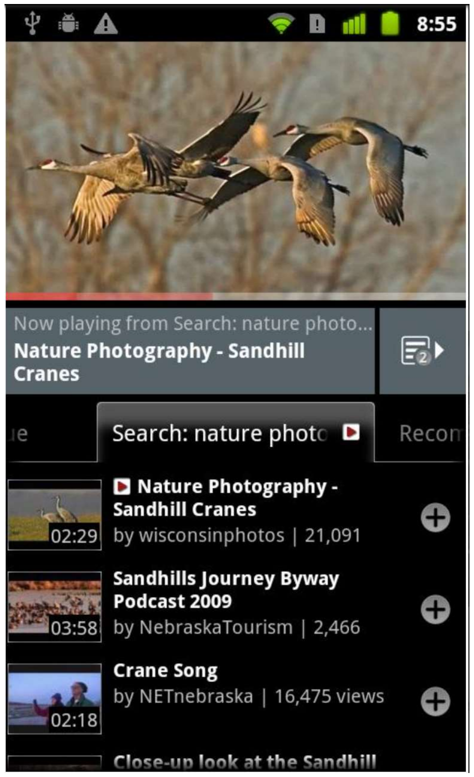
Google expressly reserves the right to supplement its invalidity contentions, including this chart, to demonstrate that the prior art invalidates the claims of the '033 patent.

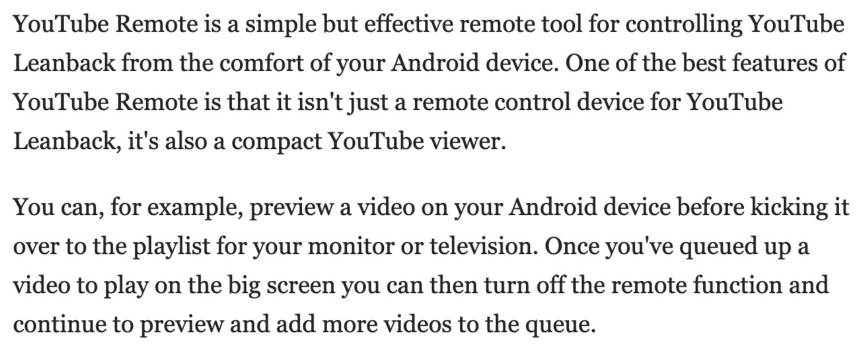
Claim 1 Portion	**Claim 1 Text**	**YT Remote System**
[1Pre]	A computing device comprising: at least one processor; a non-transitory computer-readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising:	YT Remote System discloses a computing device (e.g. a phone or computer) having at least one processor, a non-transitory computer readable medium; and program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform the recited functions.

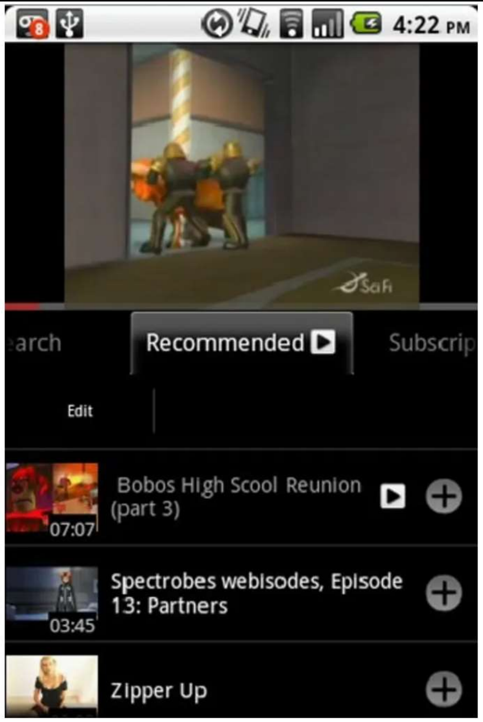
alleged invention date of July 15, 2011. While Google does not agree that Sonos is entitled to its alleged invention date, to the extent Sonos is entitled to such date Google may rely upon the same or similar functionality in the earlier source code.

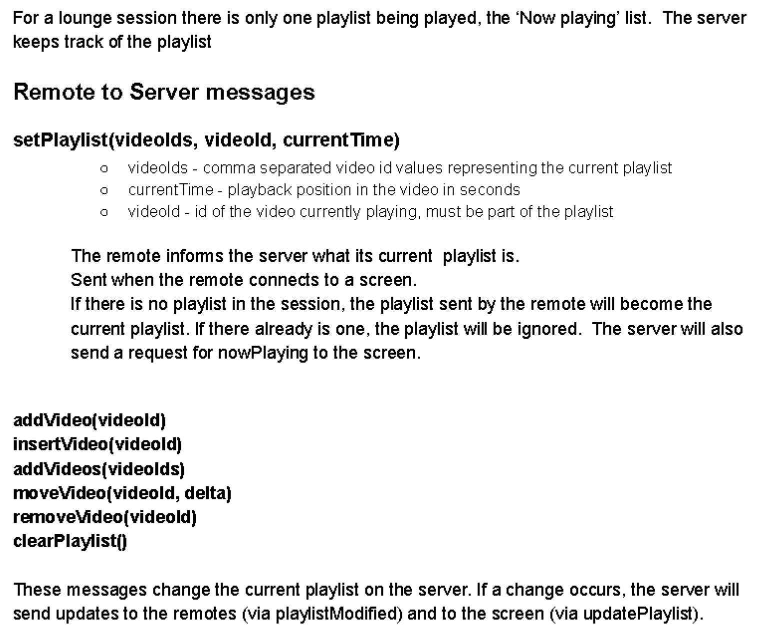
		See e.g. [1]: “YouTube Remote creates a virtual connection between your phone and YouTube Leanback. To ‘pair’ your phone with your Leanback screen, simply sign into YouTube Remote on your Android phone, and to YouTube Leanback on your Google TV or computer with the same YouTube account. Just like that, you've connected your powerful multi-touch Android screen with the biggest screen in your home. Once connected, you can use the rich browse and discovery interface on YouTube Remote to find and queue up videos to watch, and send them all to Leanback with a single tap. With YouTube Remote you can play, pause, skip forward and back and even control the sound volume.” *See e.g.* [5]  Recommended Bobos High Scool Reunion (part 3) Spectrobes webisodes, Episode 13: Partners Zipper Up Android: YouTube Remote is a free remote control tool that links the full-screen experience of YouTube Leanback with the convenience of having a touch-screen remote and playlist builder on your Android device. *See also* [7] e.g. Sample Session, Remote to Server and Remote to Screen messages *See e.g.* [8] at 1:39-50: In general, this disclosure is directed to techniques for exchanging information between a networked device. Such as a network-enabled television, and web-enabled device, Such as a remote control, via a network service (e.g., a "cloud service'). In an example, the web-enabled device can transmit control information via the network service to the networked device to control playback of media content (e.g., audio and/or video content) on the networked device. In

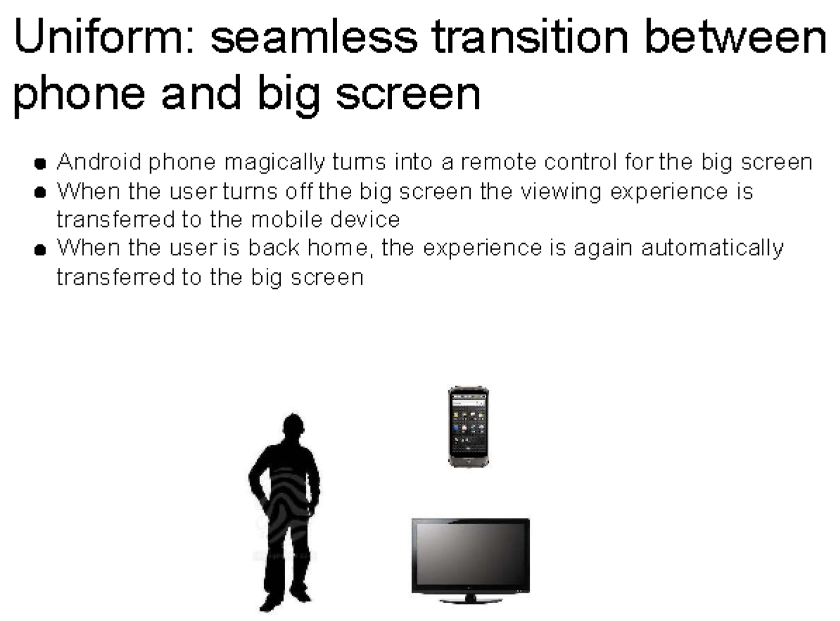
		another example, the networked device can transmit content information via the network service to the web-enabled device. Such as status information concerning the networked device. *See also* [8] at 3:14-55: Techniques of this disclosure relate to a network service or "cloud service' that acts as an intermediary between a remote control device and a controlled device. For example, the network service may receive commands from a remote control and transmit the commands to a controlled device. The network service may also receive commands or other information from the controlled device and transmit those commands or other information to the remote control. The remote control may include a remote control application executing on a mobile device. Such as a cellular telephone or a tablet computer. The controlled device may include any Internet-connected device capable of receiving commands, Such as an Internet-connected television, a set top box, a personal video recorder, a gaming console, or other net worked device. In one aspect, the remote control and the controlled device may operate as simple Hypertext Transfer Protocol HTTP clients of the network service. That is, the controlled device does not operate as a server to the remote control. Thus, any HTTP-enabled device may operate as a remote control or as a controlled device. In general, the remote control and the controlled device are configured to both listen for messages from the network service and send messages to the network service. In some examples, the network service controls pairing one or more remote controls and one or more controlled devices, receives information or commands from remote controls and controlled devices, and sends information or commands to remote controls and controlled devices. The network service may direct received information and commands to the appropriate devices based on pairing information maintained by the network service. A remote control may be configured to send a message to a controlled device to perform a task, Such as stopping

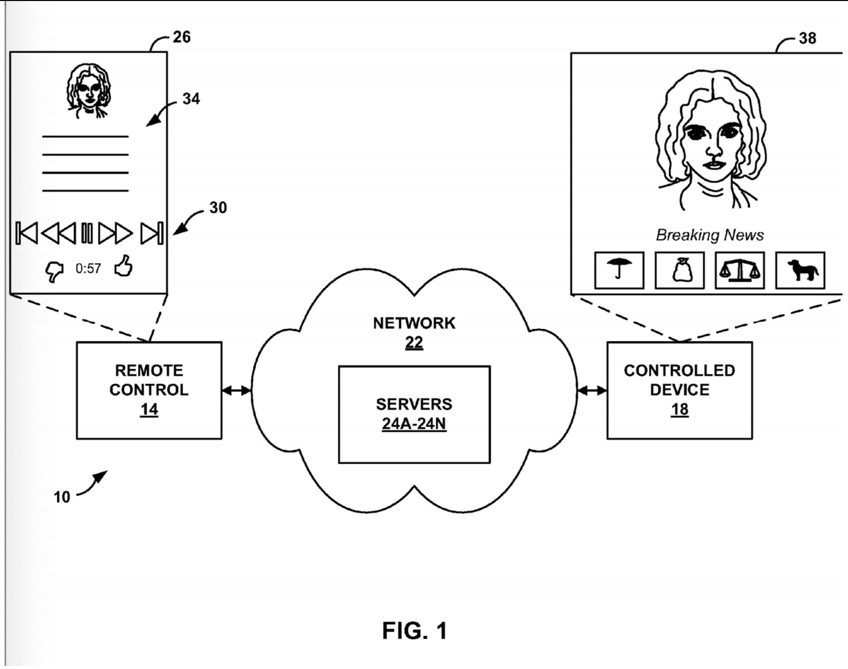
		playback of media content playing on the controlled devices or changing the media content playing on the controlled devices. To accomplish the task, the remote control first sends a message to the network service. The network service then determines the controlled device that is paired with the remote control and forwards the message to the appropriate controlled device. The controlled device receives the message from the network service and performs the task in response to receiving the message. *See e.g.* [9]:  8:55 Now playing from Search: nature photo... **Nature Photography - Sandhill Cranes** Search: nature photo **Nature Photography - Sandhill Cranes** 02:29 by wisconsinphotos | 21,091 **Sandhills Journey Byway Podcast 2009** 03:58 by NebraskaTourism | 2,466 **Crane Song** 02:18 by NETnebraska | 16,475 views **Close-up look at the Sandhill** *See* for example source code for the Android application before 12.30.2011, including for example source code located at

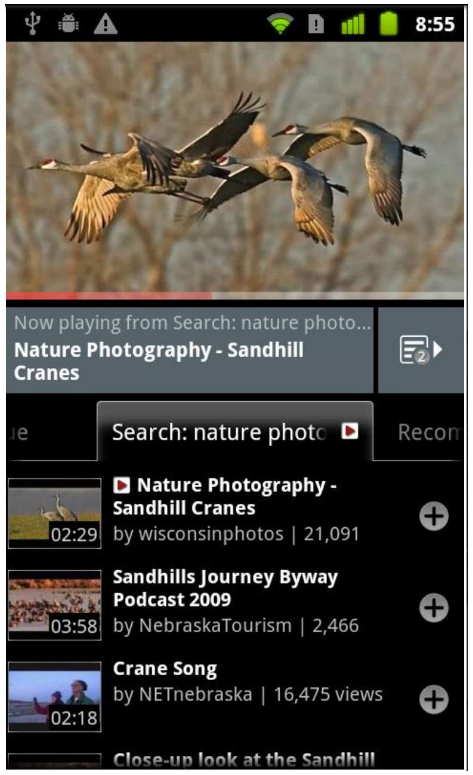
		google3/java/com/google/android/apps/ytlounge/src/com/google/android/ To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1a]	operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service;	YT Remote System discloses the computing device (e.g. a phone or computer) operating in a first mode in which the computing device is configured for playback of a remote playback queue (e.g. a YouTube watch-next queue) provided by a cloud-based computing system (e.g. the MDx server) associated with a cloud-based media service (e.g. a YouTube content server) *See e.g.* [5]  YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer. You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.

		 4:22 PM arch Recommended Subscrip Edit Bobos High Scool Reunion (part 3) 07:07 Spectrobes webisodes, Episode 13: Partners 03:45 Zipper Up *See e.g.* [7], the remote (computing device) has a current playlist, saved in the server (a cloud based computing system associated with a cloud based media service):

		 For a lounge session there is only one playlist being played, the 'Now playing' list. The server keeps track of the playlist **Remote to Server messages** **setPlaylist(videoIds, videoId, currentTime)** ○ videoIds - comma separated video id values representing the current playlist ○ currentTime - playback position in the video in seconds ○ videoId - id of the video currently playing, must be part of the playlist The remote informs the server what its current playlist is. Sent when the remote connects to a screen. If there is no playlist in the session, the playlist sent by the remote will become the current playlist. If there already is one, the playlist will be ignored. The server will also send a request for nowPlaying to the screen. **addVideo(videoId)** **insertVideo(videoId)** **addVideos(videoIds)** **moveVideo(videoId, delta)** **removeVideo(videoId)** **clearPlaylist()** These messages change the current playlist on the server. If a change occurs, the server will send updates to the remotes (via playlistModified) and to the screen (via updatePlaylist). *See e.g.* [6]

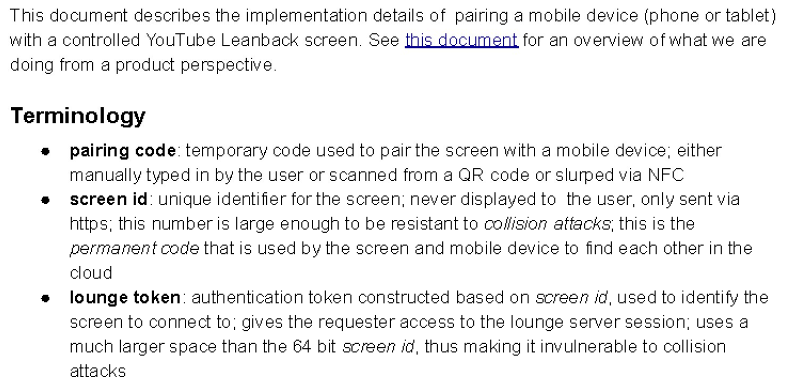
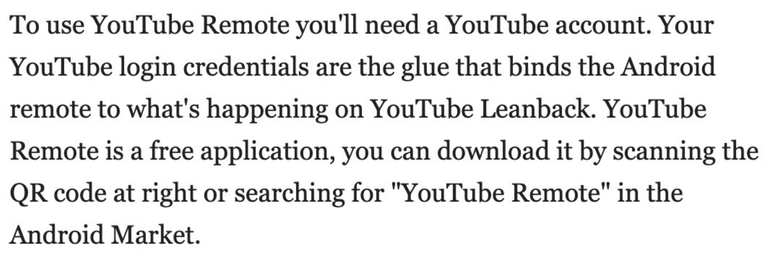
		 **Uniform: seamless transition between phone and big screen** ● Android phone magically turns into a remote control for the big screen ● When the user turns off the big screen the viewing experience is transferred to the mobile device ● When the user is back home, the experience is again automatically transferred to the big screen *See e.g.* [8] at 4:58-67: FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in accordance with one aspect of the present disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively "servers 24) in network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled device 18, and servers 24 may be distinct components (e.g., physically distinct).

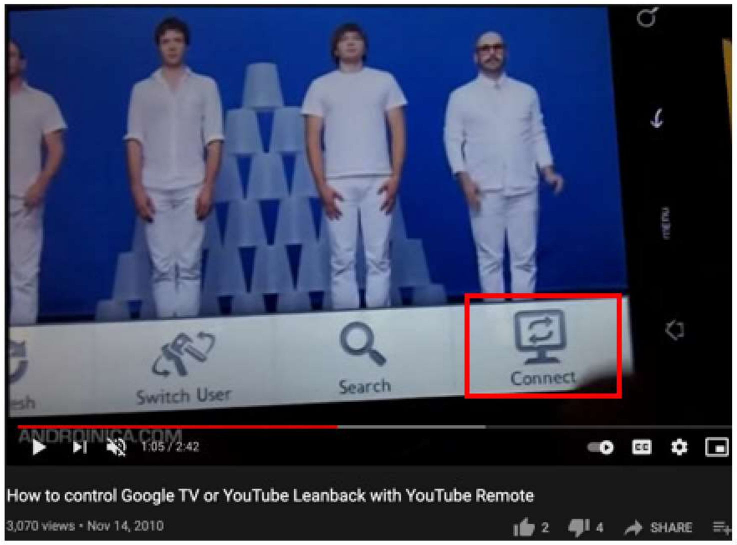
		 26 34 30 0:57 38 Breaking News NETWORK 22 SERVERS 24A-24N REMOTE CONTROL 14 CONTROLLED DEVICE 18 10 FIG. 1 *See e.g.* [8] at 8:54-11:6, and Fig. 3 *See e.g.* [8] at 12:50-65: In some examples, any application of applications 130 executed by processor 132 may require data from one or more of servers, such as servers 24 shown in FIG. 1. Network module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor 132 for further processing. Network module 136 may support wireless or wired communication, and includes appropriate hardware and software to provide wireless or wired communication. For example, network module 136 may include an antenna, modulators, demodulators, amplifiers, and other circuitry to effectuate communication between controlled device 118 and one or more servers associated with a network. Network module may 100 may communicate with one or more

		servers associated with the network according to a network communication protocol, such as, for example, hypertext transfer protocol (HTTP), HTTP secured by transport layer security or secure sockets. *See e.g.* [9]:  8:55 Now playing from Search: nature photo... Nature Photography - Sandhill Cranes Search: nature photo Recon Nature Photography - Sandhill Cranes 02:29 by wisconsinphotos | 21,091 Sandhills Journey Byway Podcast 2009 03:58 by NebraskaTourism | 2,466 Crane Song 02:18 by NETnebraska | 16,475 views Close-up look at the Sandhill *See* for example source code for the Android application before 12.30.2011, including for example source code located in subdirectories YTR[2]/src/com/google/android/ytremote;

2 Throughout, "YTR" refers to google3/java/com/google/android/apps/ytlounge/

		google3/video/youtube/src/web/javascript/library, google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ and google3/video/youtube/src/web/javascript/library/tv/views/video/. *See also e.g.*: YTR/src/com/google/android/ytremote/backend; YTR/src/com/google/android/ytremote/backend/station; YTR/src/com/google/android/ytremote To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider I. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1b]	while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue;	The YT Remote System discloses while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue. *See e.g.*[3]

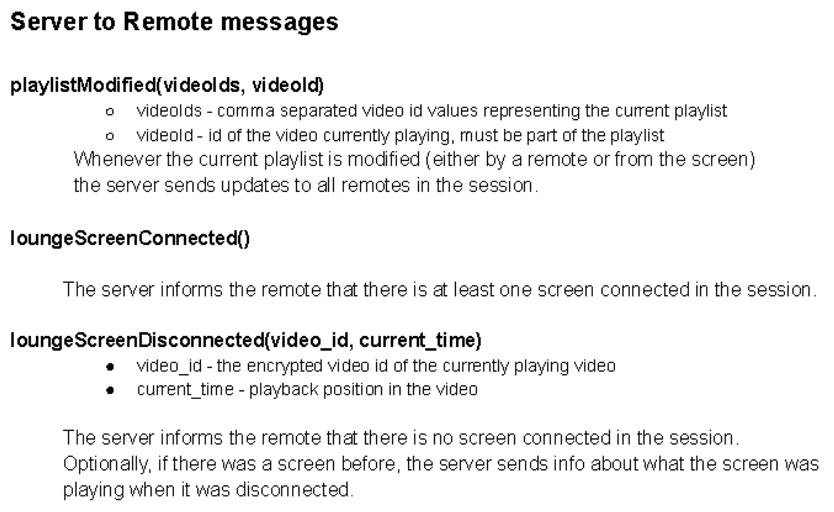
		 This document describes the implementation details of pairing a mobile device (phone or tablet) with a controlled YouTube Leanback screen. See this document for an overview of what we are doing from a product perspective. **Terminology** • **pairing code**: temporary code used to pair the screen with a mobile device; either manually typed in by the user or scanned from a QR code or slurped via NFC • **screen id**: unique identifier for the screen; never displayed to the user, only sent via https; this number is large enough to be resistant to *collision attacks*; this is the *permanent code* that is used by the screen and mobile device to find each other in the cloud • **lounge token**: authentication token constructed based on *screen id*, used to identify the screen to connect to; gives the requester access to the lounge server session; uses a much larger space than the 64 bit *screen id*, thus making it invulnerable to collision attacks *See e.g.* [5]:  To use YouTube Remote you'll need a YouTube account. Your YouTube login credentials are the glue that binds the Android remote to what's happening on YouTube Leanback. YouTube Remote is a free application, you can download it by scanning the QR code at right or searching for "YouTube Remote" in the Android Market. The YT remote identifies devices connected to the same LAN and connected to the same account. *See e.g.* [4]:



How to control Google TV or YouTube Leanback with YouTube Remote

3,070 views • Nov 14, 2010

See e.g. [7]:



Server to Remote messages

playlistModified(videoIds, videoId)

- videoIds - comma separated video id values representing the current playlist
- videoId - id of the video currently playing, must be part of the playlist

Whenever the current playlist is modified (either by a remote or from the screen) the server sends updates to all remotes in the session.

loungeScreenConnected()

The server informs the remote that there is at least one screen connected in the session.

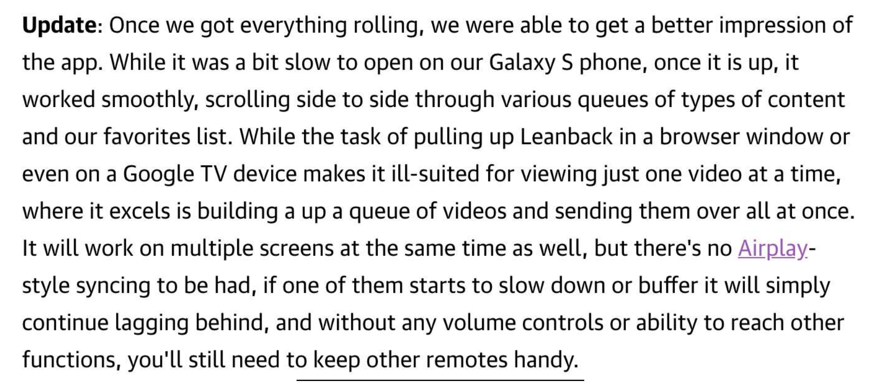
loungeScreenDisconnected(video_id, current_time)

- video_id - the encrypted video id of the currently playing video
- current_time - playback position in the video

The server informs the remote that there is no screen connected in the session. Optionally, if there was a screen before, the server sends info about what the screen was playing when it was disconnected.

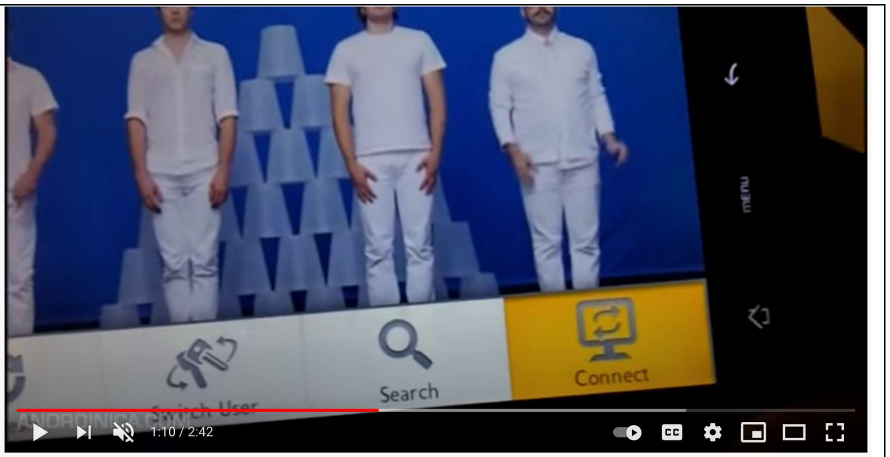
See e.g. [8] at 4:21-57:

		Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session. In another example, a user may be presented with a quick response (“OR”) code via the controlled device that the user scans with the remote control (e.g., using a camera of the remote control). The QR code identifies a user account or previously initiated session maintained by the network Service. Upon Scanning the QR code, the remote control may send a message to the network service indicating that the network service should assign a unique identification number to the remote control and pair the remote control with the user account or session identified by the QR code. In this manner, one or more remote controls may control one or more controlled devices via the network service. Using the network service to transmit and receive messages between a remote control and a controlled device may enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each other. The network

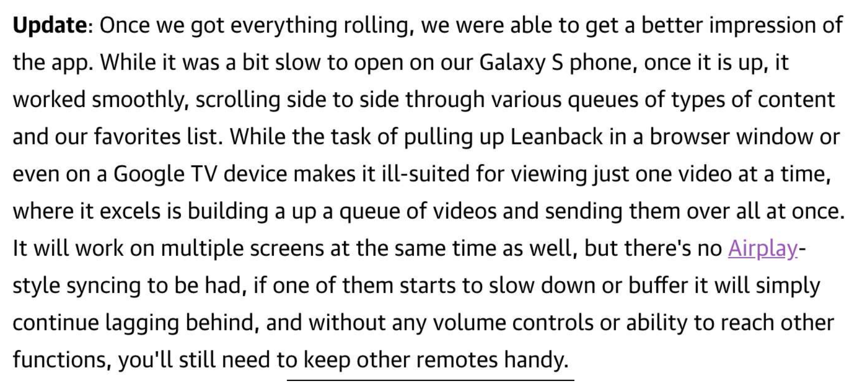
		service may also enable pairing of a nearly limitless number of remote controls and controlled devices. *See e.g.* [10]: “The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.” *See e.g.* [11]  **Update**: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy. *See* for example source code for the Android application before 12.30.2011, including for example source code located in subdirectories YTR/src/com/google/android/ytremote/adapter, YTTVF[3]/youtube/, YTTVF/youtube/tv/services, YTTVF/youtube/players/ YTTVF/youtube/tv/components, YTTVF/net/browserchannel/, YTR/src/com/google/android/ytremote/backend/, and google3/video/youtube/src/web/javascript/library/tv/, google3/video/youtube/src/web/javascript/library/www/remote/,

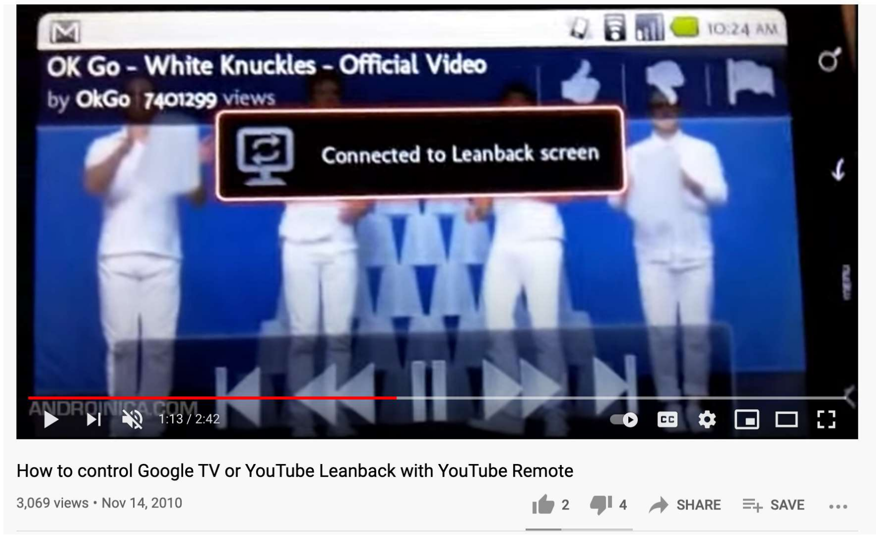
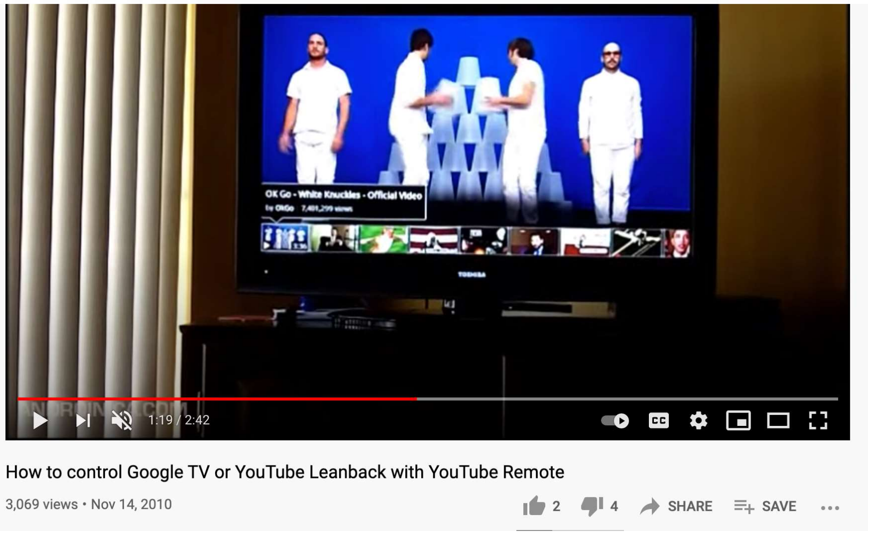
[3] Throughout, “YTTVF” refers to YTTVFlashLite12282011/google3/flash/actionscript/com/google/

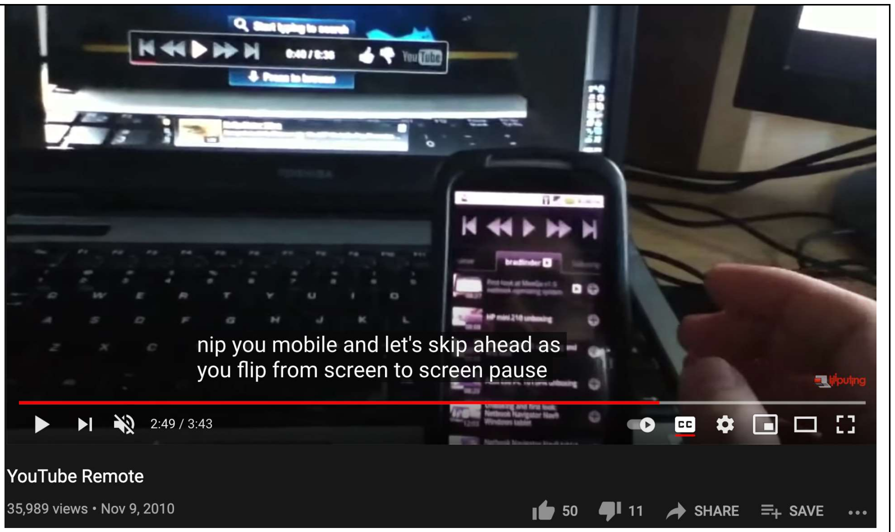
		google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ *See also e.g.*: YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote; YTTVF/youtube/tv/services; YTR/src/com/google/android/ytremote/backend/station. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with prior art including the references cited in Rider J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1c]	while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices;	The YT Remote System discloses while displaying the representation of the one or more playback devices, receiving user input indicating a selection of at least one given playback device from the one or more playback devices; *See e.g.*: [4], selection of the "Connect" icon by the user

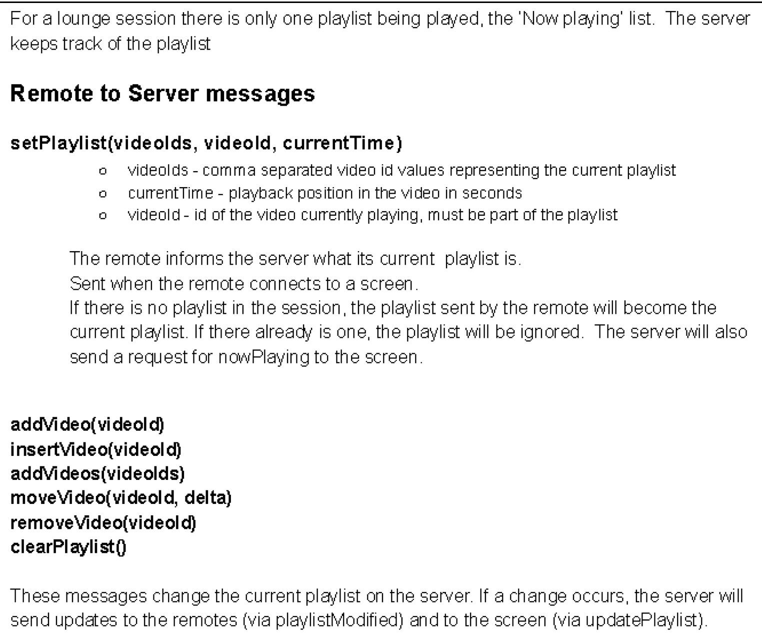
		 Switch User Search Connect menu ANDROINICA.COM 1:10 / 2:42 How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 2 4 SHARE SAVE *See e.g.* [8] at 4:21-57: Remote controls and controlled devices may be paired using any one of several different techniques. As one example, a user may maintain a user account using the network service, and the remote controls and controlled devices may be associated with the user account. For example, upon connecting to a network service, the remote controls and controlled devices may notify the network service that the remote controls and controlled devices are connected to the network. The network service may, in some examples, determine whether the remote controls and controlled devices are authorized to be associated with the user account. If authorized, the network service initiates a session and assigns the remote controls and controlled devices unique identification numbers. The network service uses the unique identification numbers for pairing during a session. In another example, a user may be presented with a quick response ("OR") code via the controlled device that the user scans with the remote control (e.g.,

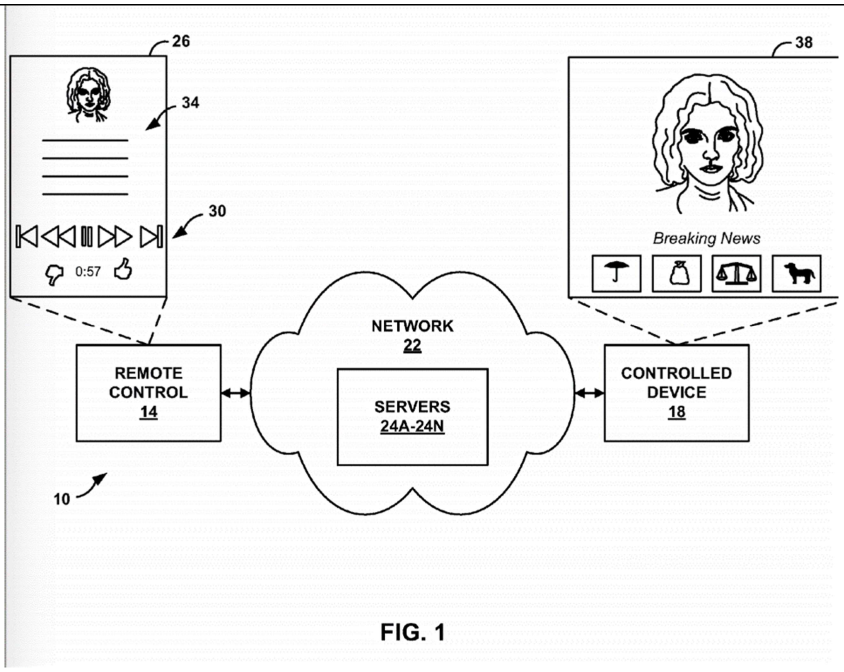
		using a camera of the remote control). The QR code identifies a user account or previously initiated session maintained by the network Service. Upon Scanning the QR code, the remote control may send a message to the network service indicating that the network service should assign a unique identification number to the remote control and pair the remote control with the user account or session identified by the QR code. In this manner, one or more remote controls may control one or more controlled devices via the network service. Using the network service to transmit and receive messages between a remote control and a controlled device may enable non-traditional devices having rich input and display capabilities to act as a remote control. In addition, by using the network service as an intermediary, the remote control and the controlled device, in various instances, may not need to be connected to the same local area network, nor in physical proximity to each other. The network service may also enable pairing of a nearly limitless number of remote controls and controlled devices. *See also* [8] e.g. at 8:1-59 (Pairing of remote controls with controlled device). *See e.g.* [10] “The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.” *See e.g.* [11]

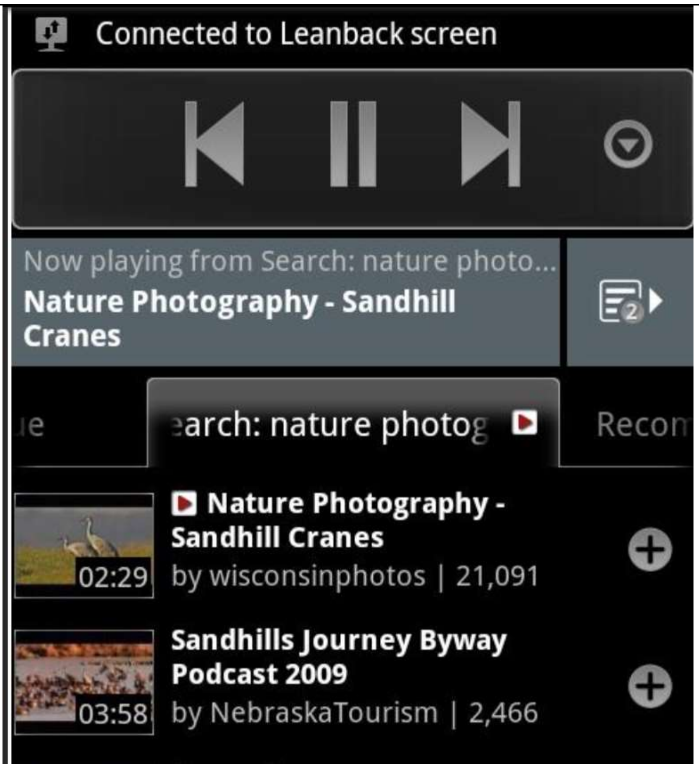
		 **Update**: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy. *See* for example source code for the Android application before 12.30.2011, including for example source code located in subdirectories YTR/src/com/google/android/ytremote/, and google3/video/youtube/src/web/javascript/library/tv/ *See also e.g.*: YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1d]	based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device,	The YT Remote System discloses based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device; *See e.g.*: [4], based on the selection of the "Connect" icon by the user, the leanback screen takes over responsibility for playback of the remote playback queue from the computing device:

		 OK Go - White Knuckles - Official Video by OkGo 7401299 views Connected to Leanback screen 10:24 AM ANDROINICA.COM 1:13 / 2:42 2 4 SHARE SAVE How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010  OK Go - White Knuckles - Official Video 1:19 / 2:42 2 4 SHARE SAVE How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 *See also e.g.* [2]:

		 nip you mobile and let's skip ahead as you flip from screen to screen pause 2:49 / 3:43 YouTube Remote 35,989 views • Nov 9, 2010 50 11 SHARE SAVE *See e.g.* [7]:

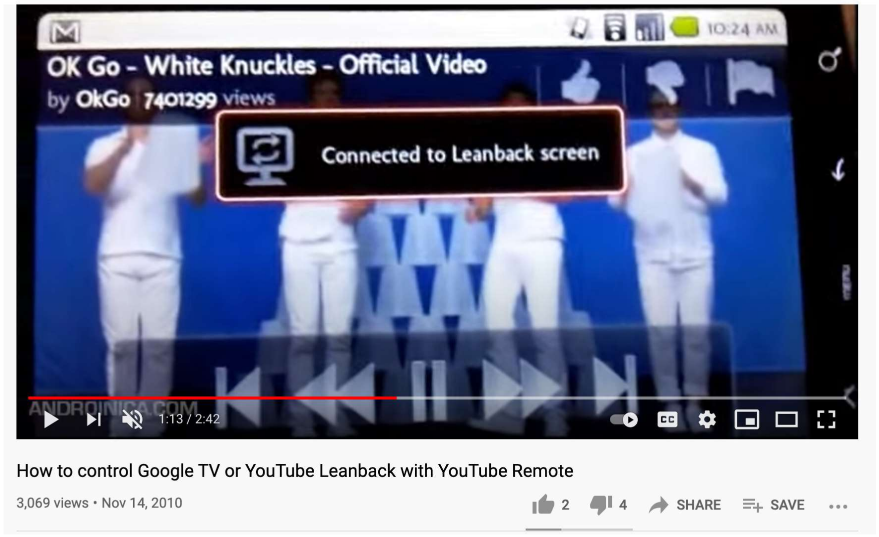
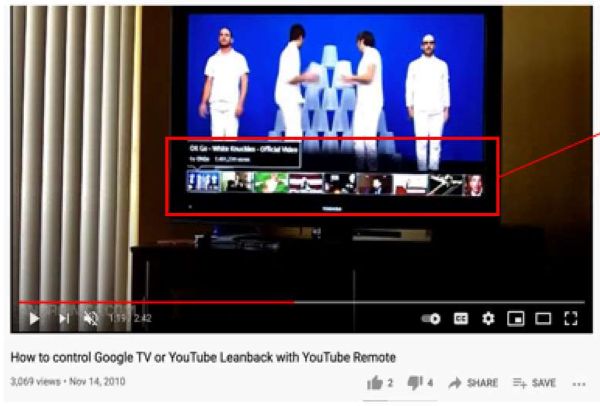
		 For a lounge session there is only one playlist being played, the 'Now playing' list. The server keeps track of the playlist **Remote to Server messages** **setPlaylist(videoIds, videoId, currentTime)** ○ videoIds - comma separated video id values representing the current playlist ○ currentTime - playback position in the video in seconds ○ videoId - id of the video currently playing, must be part of the playlist The remote informs the server what its current playlist is. Sent when the remote connects to a screen. If there is no playlist in the session, the playlist sent by the remote will become the current playlist. If there already is one, the playlist will be ignored. The server will also send a request for nowPlaying to the screen. **addVideo(videoId)** **insertVideo(videoId)** **addVideos(videoIds)** **moveVideo(videoId, delta)** **removeVideo(videoId)** **clearPlaylist()** These messages change the current playlist on the server. If a change occurs, the server will send updates to the remotes (via playlistModified) and to the screen (via updatePlaylist). *See e.g.* [8] at 4:58-67: FIG. 1 is a block diagram illustrating an example networked environment 10 with a remote control 14 and controlled device 18, in accordance with one aspect of the present disclosure. According to an aspect of the disclosure, remote control 14 communicates with controlled device 18 via network 22 and servers 24A-24N (collectively "servers 24) in network 22. As shown in FIG. 1, according to some examples, remote control 14, controlled device 18, and servers 24 may be distinct components (e.g., physically distinct).

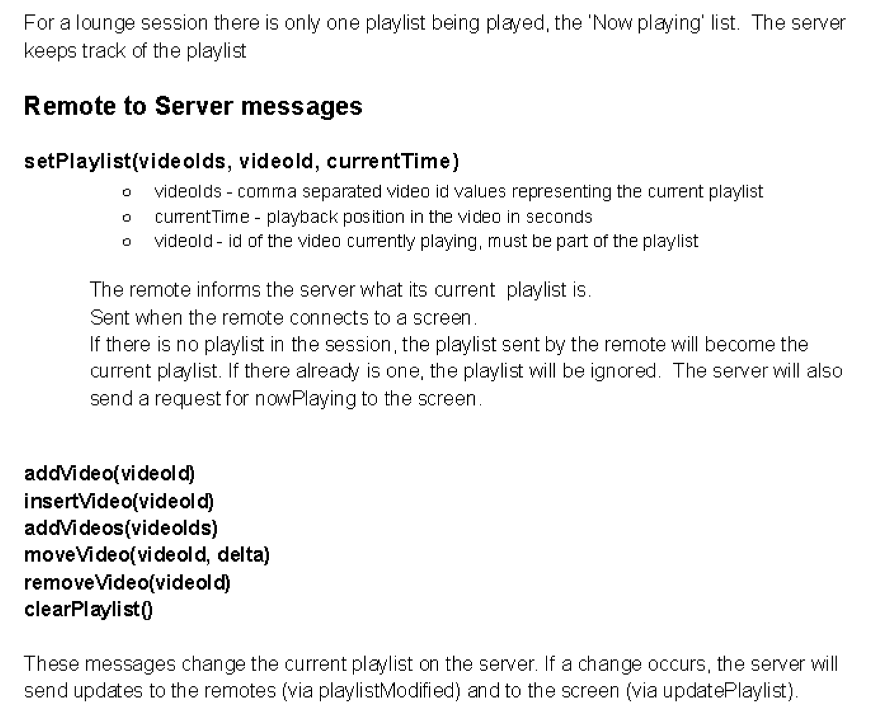
		 26 34 30 0:57 38 Breaking News NETWORK 22 SERVERS 24A-24N REMOTE CONTROL 14 CONTROLLED DEVICE 18 10 FIG. 1 *See e.g.* [9]:

		 Connected to Leanback screen Now playing from Search: nature photo... Nature Photography - Sandhill Cranes earch: nature photog Recon Nature Photography - Sandhill Cranes 02:29 by wisconsinphotos | 21,091 Sandhills Journey Byway Podcast 2009 03:58 by NebraskaTourism | 2,466 *See* for example source code for the Android application before 12.30.2011, including for example source code located at YTR/src/com/google/android/ytremote/. *See also* for example source code located in subdirectories YTR/res/values, YTL[4]/browserchannel, YTTVF/google/youtube/, YTTVF/net/browserchannel/, and google3/video/youtube/src/web/javascript/library/www/remote/, google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ *See also e.g.*:

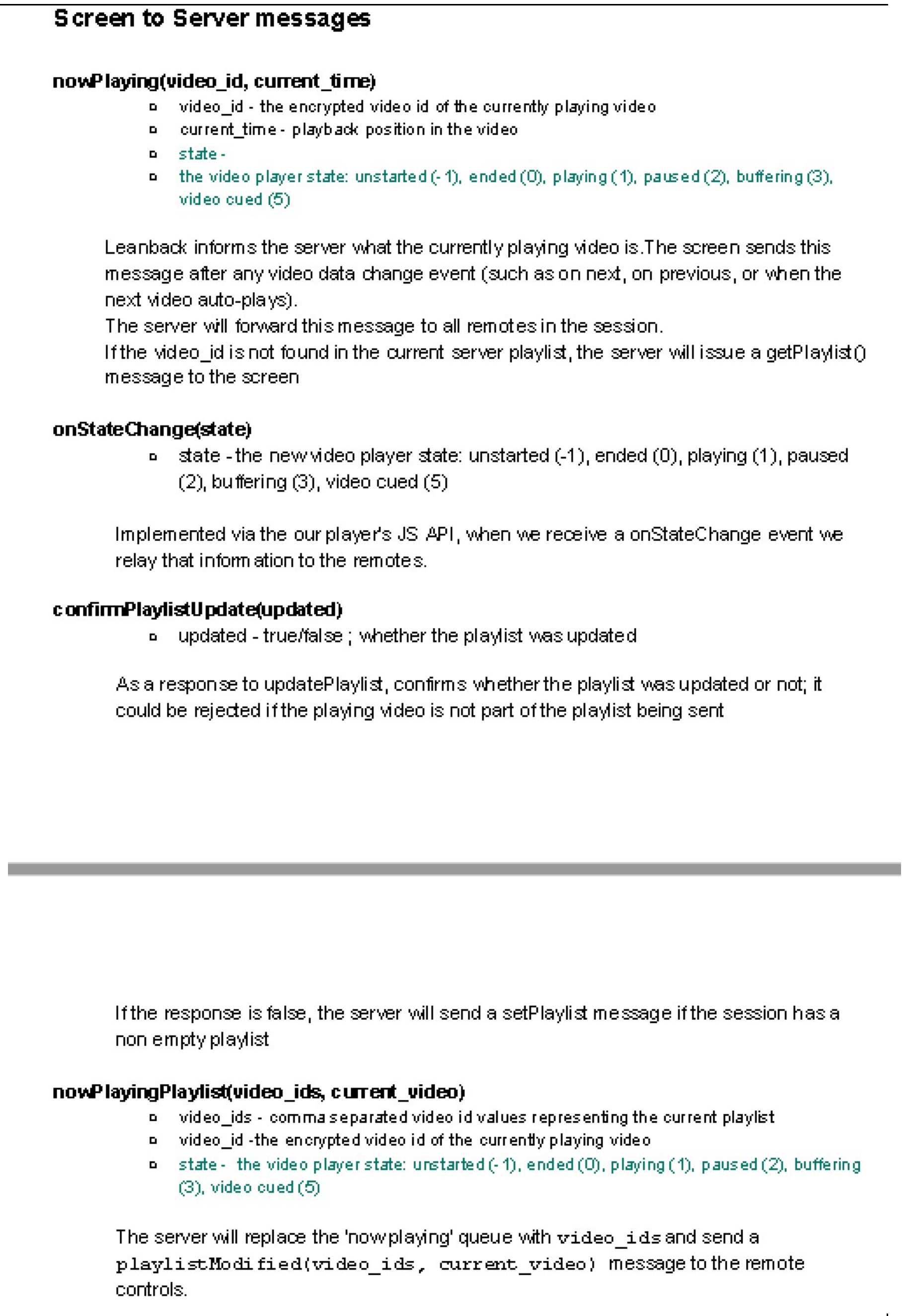
[4] Throughout, "YTL" refers to google3/java/com/google/youtube/lounge/

		YTR/res/values; YTR/src/com/google/android/ytremote; YTL/browserchannel. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1e]	wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item;	The YT Remote System discloses that the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item; *See e.g.* [4], following the instruction from the control device to the Leanback screen, the Leanback screen communicates with the YT cloud-based computing system in order to obtain data identify a next one or more media items in the remote playback queue, retrieving at least one media item (the OK Go – White Knuckles – Official Video) in the remote playback queue, and playing it back.

		 OK Go - White Knuckles - Official Video by OkGo 7401299 views Connected to Leanback screen 10:24 AM ANDROINICA.COM 1:13 / 2:42 How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 2 4 SHARE SAVE  One or more media items in the remote playback queue How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 2 4 SHARE SAVE The user's YT account includes playlists or channels, with videos automatically added to the user's feed. The playlist or channel comprise multimedia content added to a queue, which is accessed on the leanback screen. "When you search, your results end up in a channel and as soon as you finish playing one video, youtube leanback automatically plays

		the rest in sequence" (https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1) "Your feed is personalized to you, based on your youtube preferences … and once one video ends, the next automatically begins" (https://blog.youtube/news-and-events/youtube-leanback-offers-effortless?m=1) *See e.g.* [7] Remote to Server, Remote to Screen, Screen to Server and Server to Screen:  For a lounge session there is only one playlist being played, the 'Now playing' list. The server keeps track of the playlist **Remote to Server messages** **setPlaylist(videoIds, videoId, currentTime)** ○ videoIds - comma separated video id values representing the current playlist ○ currentTime - playback position in the video in seconds ○ videoId - id of the video currently playing, must be part of the playlist The remote informs the server what its current playlist is. Sent when the remote connects to a screen. If there is no playlist in the session, the playlist sent by the remote will become the current playlist. If there already is one, the playlist will be ignored. The server will also send a request for nowPlaying to the screen. **addVideo(videoId)** **insertVideo(videoId)** **addVideos(videoIds)** **moveVideo(videoId, delta)** **removeVideo(videoId)** **clearPlaylist()** These messages change the current playlist on the server. If a change occurs, the server will send updates to the remotes (via playlistModified) and to the screen (via updatePlaylist).

		Server to Screen messages **setPlaylist(videoIds, currentIndex, currentTime)** ○ videoIds - comma separated video id values representing the current playlist ○ currentTime - playback position in the video in seconds ○ currentIndex- index of the video currently playing Sets the playlist from the screen and starts playing the current_video from the current_time. If current_video is not present will play the first video in the list. Should no other message come from the remote, the screen autoplays the videos in the list. **updatePlaylist(videoIds)** ○ videoIds - comma separated video id values representing the current playlist Updates the current playlist. The currently playing video must be in videos. **getPlaylist()** The server makes a request to the screen to send its current playlist. **getNowPlaying()** The server makes a request to the screen to send a now playing message.



Screen to Server messages

nowPlaying(video_id, current_time)

- video_id - the encrypted video id of the currently playing video
- current_time - playback position in the video
- state -
- the video player state: unstarted (-1), ended (0), playing (1), paused (2), buffering (3), video cued (5)

Leanback informs the server what the currently playing video is.The screen sends this message after any video data change event (such as on next, on previous, or when the next video auto-plays).
The server will forward this message to all remotes in the session.
If the video_id is not found in the current server playlist, the server will issue a getPlaylist() message to the screen

onStateChange(state)

- state - the new video player state: unstarted (-1), ended (0), playing (1), paused (2), buffering (3), video cued (5)

Implemented via the our player's JS API, when we receive a onStateChange event we relay that information to the remotes.

confirmPlaylistUpdate(updated)

- updated - true/false ; whether the playlist was updated

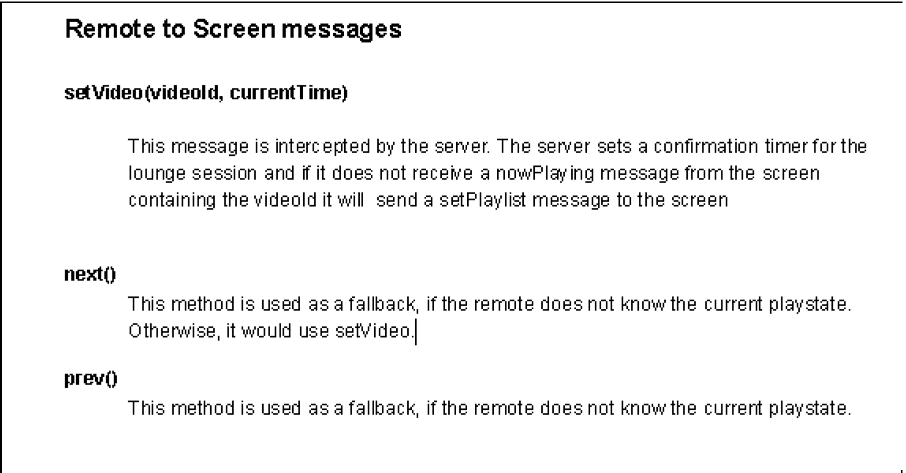
As a response to updatePlaylist, confirms whether the playlist was updated or not; it could be rejected if the playing video is not part of the playlist being sent

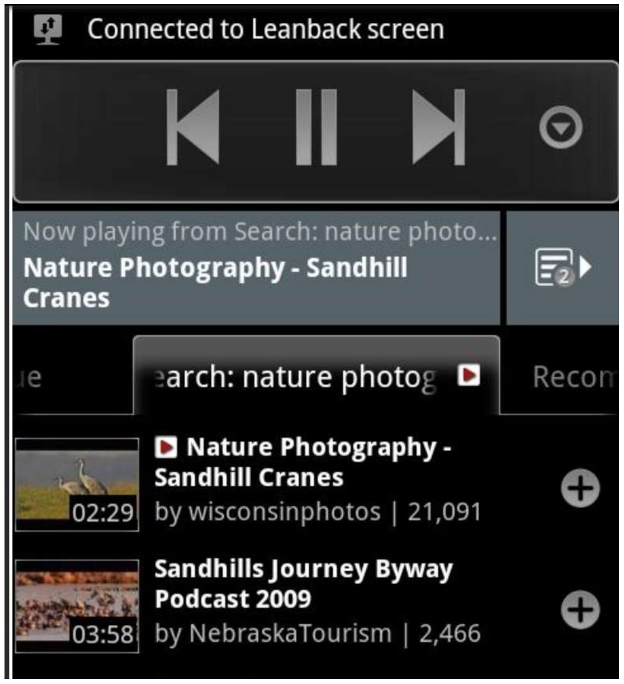
If the response is false, the server will send a setPlaylist message if the session has a non empty playlist

nowPlayingPlaylist(video_ids, current_video)

- video_ids - comma separated video id values representing the current playlist
- video_id -the encrypted video id of the currently playing video
- state - the video player state: unstarted (-1), ended (0), playing (1), paused (2), buffering (3), video cued (5)

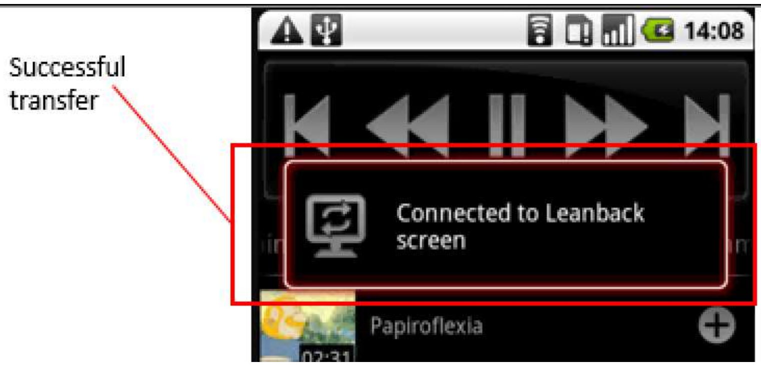
The server will replace the 'now playing' queue with `video_ids` and send a `playlistModified(video_ids, current_video)` message to the remote controls.

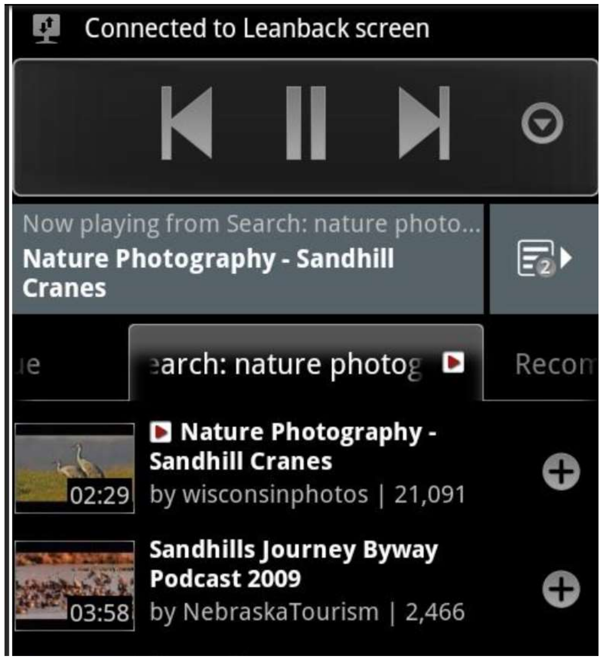
		 **Remote to Screen messages** **setVideo(videoId, currentTime)** This message is intercepted by the server. The server sets a confirmation timer for the lounge session and if it does not receive a nowPlaying message from the screen containing the videoId it will send a setPlaylist message to the screen **next()** This method is used as a fallback, if the remote does not know the current playstate. Otherwise, it would use setVideo. **prev()** This method is used as a fallback, if the remote does not know the current playstate. *See e.g.* [8] at Fig. 4 and 12:50-65: In some examples, any application of applications 130 executed by processor 132 may require data from one or more of servers, such as servers 24 shown in FIG. 1. Network module 136 is configured to transmit data/requests to and receive data/responses from one or more servers via network. Network module 136 may provide received data to processor 132 for further processing. Network module 136 may support wireless or wired communication, and includes appropriate hardware and software to provide wireless or wired communication. For example, network module 136 may include an antenna, modulators, demodulators, amplifiers, and other circuitry to effectuate communication between controlled device 118 and one or more servers associated with a network. Network module may 100 may communicate with one or more servers associated with the network according to a network communication protocol, such as, for example, hypertext transfer protocol (HTTP), HTTP secured by transport layer security or secure sockets *See e.g.* [8] at 13:4-15:

		Controlled device 118 may be used, in some examples, in conjunction with a remote control, such as remote control 14 shown in FIG. 1, remote controls 62 shown in FIG. 2, or remote control 75 shown in FIG. 3. For example, storage device 92 may store application instructions associated with a video application or web browser for displaying video content from the World Wide Web (e.g., YouTube® content, Hulu® content, Netflix® content, etc.). A user may interact with user interface 120 to execute the video or web browser application. Processor 120 then executes th video or web browser application and causes display 124 to display content to the user. *See e.g.* [9]:  Connected to Leanback screen Now playing from Search: nature photo... Nature Photography - Sandhill Cranes earch: nature photog Recon Nature Photography - Sandhill Cranes 02:29 by wisconsinphotos | 21,091 Sandhills Journey Byway Podcast 2009 03:58 by NebraskaTourism | 2,466 *See* for example source code for the Google MDx server before 12.30.2011, including for example server source code located at

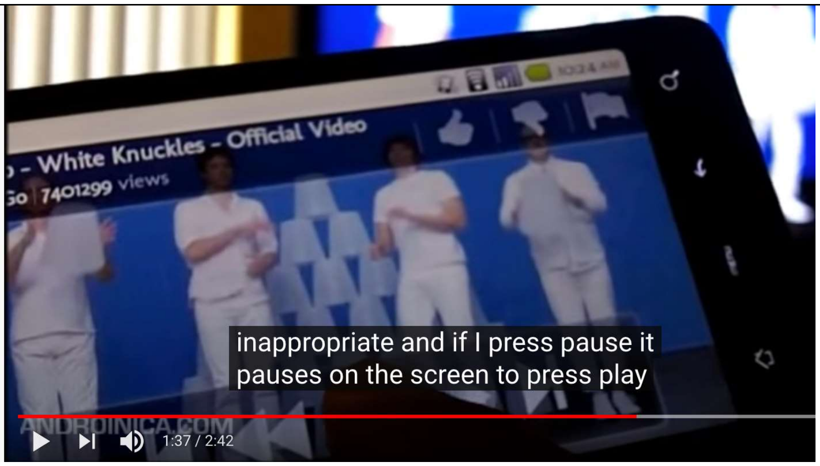
		google3/java/com/google/youtube/lounge, and receiver source code located at google3/flash/as3/com/google/youtube/ and google3/flash/actionscript/com/google/ or google3/video/youtube/src/web/javascript/library/tv, google3/video/youtube/src/web/javascript/library/www/remote/ and servlets located at google3/video/youtube/src/python/. *See also* for example source code located in subdirectories YTTV[5]/modules/leanback and YTTV/application, YTTVF/net/browserchannel/, YTTVF/youtube/, google3/video/youtube/src/python/. *See also* for example source code located in subdirectories google3/video/youtube/src/web/javascript/library/tv/, google3/video/youtube/src/web/javascript/library/www/, google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ *See also e.g.*: YTTV/modules/leanback; YTTV/application To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1f]	detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device; and	The YT Remote System discloses detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device. *See e.g.* [1]:

[5] Throughout, "YTTV" refers to YTTVLeanback12022011/google3/flash/as3/com/google/youtube/.

		 Successful transfer 14:08 Connected to Leanback screen Papiroflexia 02:31 *See e.g.* [8] at 5:29-41: In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be used to present information to a user. For example, user interface 26 may display controls 30 and information 34 associated with content being played on controlled device 18. Controls 30 may depend on the capability of remote control 14 or controlled device 18, and include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new content, etc. The type and quantity of information 34 may also depend on the capability of remote control 14 and controlled device 18, and include, for example, playback information Such as time remaining of content, playlist information, content rating information, etc.). *See* [8] e.g. at 5:42-63: Controlled device 18 may include a variety of network enabled devices, such as a network enabled television, set top box, personal video recorder, or other device capable of being network-connected and controlled remotely. In an example, controlled device 18 is an Internet-connected television that is configured to receive signals from and transmit signals to network 14. For example, controlled device 18 may be configured to initiate contact with servers 24. For example, controlled device 18 may notify servers 24 that controlled device 18 is connected to network 22. Controlled device 18 may

		notify servers 24, for example, automatically upon being powered on. In another example, a user may log in to a user account maintained by the servers 24 using controlled device 18, thereby notifying servers 24 that controlled device 18 is connected to network 22. Controlled device 18 can also be configured to transmit a message to servers 24 of network 22 that identifies controlled device 18, which can be used by servers 24 to pair controlled device 18 with remote control 14. The message may also contain notification or content data for updating a user interface of remote control (e.g., indicating completion of a task, such as completing playback of content). *See e.g.* [9]:  Connected to Leanback screen Now playing from Search: nature photo... Nature Photography - Sandhill Cranes earch: nature photog Recon Nature Photography - Sandhill Cranes 02:29 by wisconsinphotos | 21,091 Sandhills Journey Byway Podcast 2009 03:58 by NebraskaTourism | 2,466 *See* for example source code for the Android application before 12.30.2011, including for example source code located at YTR/src/com/google/android/ytremote/, and YTR/res/. *See also* for

		example source code located in subdirectories YTR/res/values and YTR/src/com/google/android/ytremote, and YTTVF/youtube/, YTTVF/net/browserchannel/. *See also* for example source code located in subdirectories google3/video/youtube/src/web/javascript/library/tv/. *See also e.g.:* YTR/res/values; YTR/src/com/google/android/ytremote. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[1g]	after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue.	The YT Remote System discloses after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue. *See e.g.* [4] the user's phone (the control device) allows the user to press pause or play on the phone and the leanback screen in turns pauses or plays the video:


- White Knuckles - Official Video
7401299 views
inappropriate and if I press pause it
pauses on the screen to press play
ANDROINICA.COM
1:37 / 2:42

See e.g. [5]

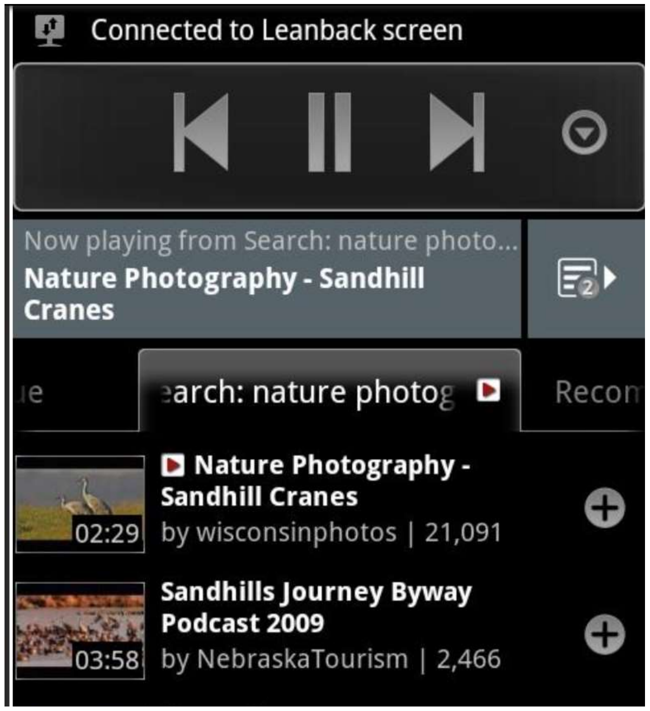
YouTube Remote is a simple but effective remote tool for controlling YouTube Leanback from the comfort of your Android device. One of the best features of YouTube Remote is that it isn't just a remote control device for YouTube Leanback, it's also a compact YouTube viewer.

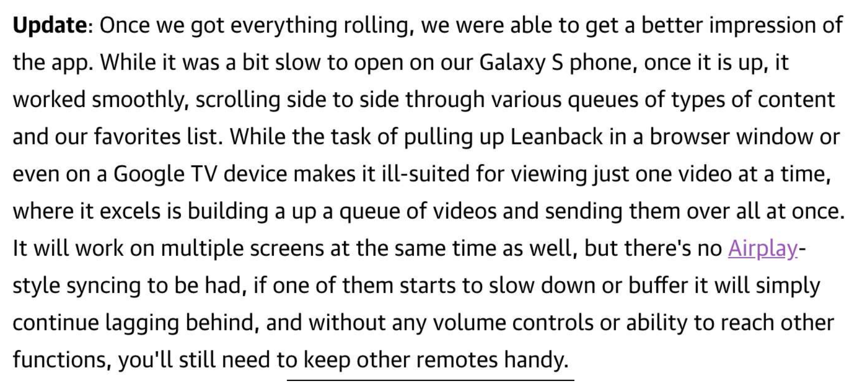
You can, for example, preview a video on your Android device before kicking it over to the playlist for your monitor or television. Once you've queued up a video to play on the big screen you can then turn off the remote function and continue to preview and add more videos to the queue.

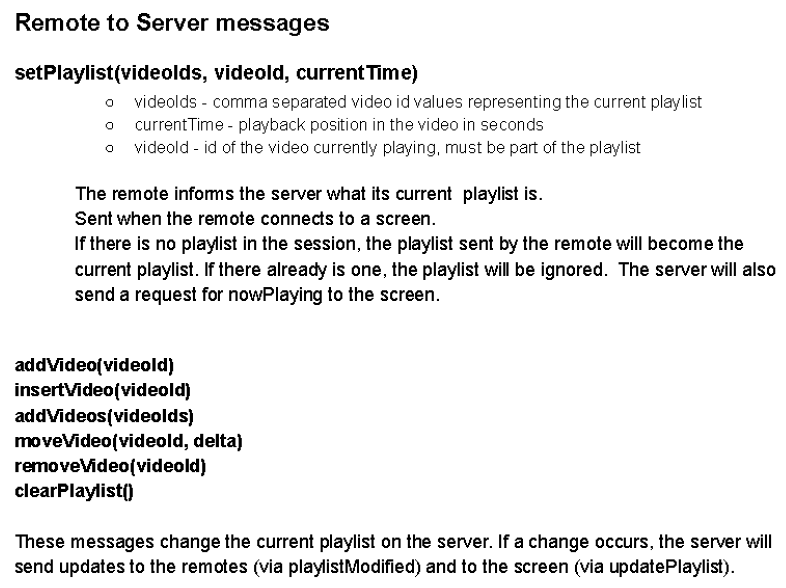
See e.g. [8] at 5:29-41:

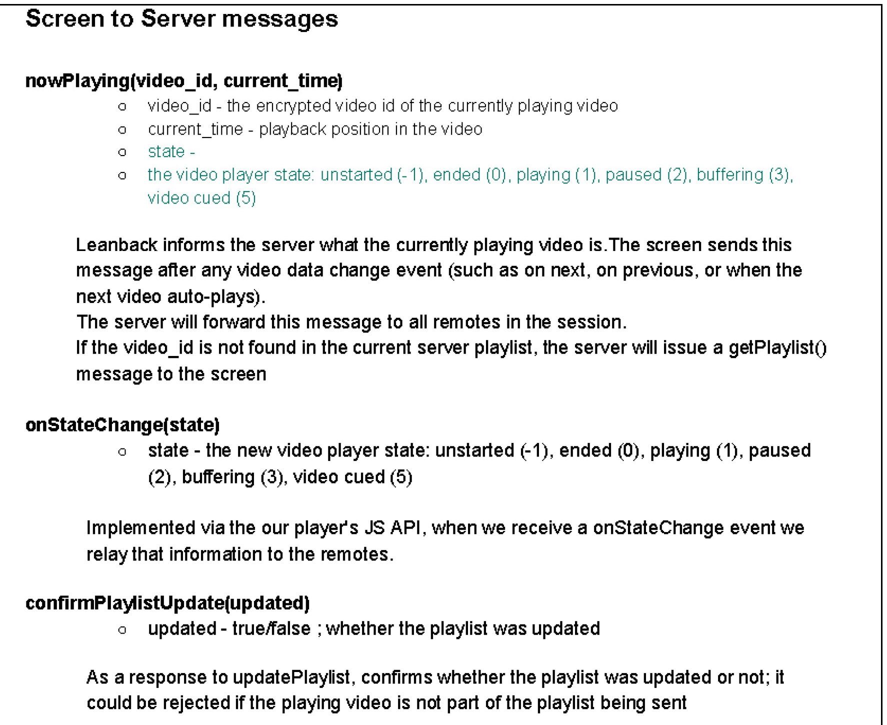
In the example shown in FIG. 1, remote control 14 includes a user interface 26 that may be used to present information to a user. For example, user interface 26 may display controls 30 and information 34 associated with content being played on controlled device 18. Controls 30 may depend on the capability of remote control 14 or controlled device 18, and include, for example, fast forward, reverse, skip ahead or back, play, stop, move to new content, etc. The type and quantity of information 34 may also depend on the

		capability of remote control 14 and controlled device 18, and include, for example, playback information Such as time remaining of content, playlist information, content rating information, etc.). *See e.g.* [8] at 18:55-19:22: FIG. 9 is a flowchart illustrating an example operation of a controlled device communicating with a network server, in accordance with one aspect of the present disclosure. For purposes of illustration only, the method of FIG. 9 is described with respect to networked environment 10 of FIG. 1, though various other systems and/or devices may be utilized to implement or perform the method shown in FIG. 9. In some examples, server 24 receives a message from controlled device 18 having a controlled device identifier and content information (250). For example, the message from controlled device 18 may contain an SID issued by servers 24 that identifies controlled device 18 as being part of a session. In addition, the message may contain content information intended to notify a user of an event regarding controlled device 18, or to prompt a user of remote control 14 to take an action (e.g., notification that playback has stopped, notification that playback of new content has begun, and the like). The content information may be used, for example, to update a user interface of remote control 14. After receiving the message from controlled device 18, server 24 retrieves a remote control identifier that identifies one or more remote controls 14 intended to receive the content information (224). For example, server 24 may query a database of stored identification numbers to deter mine which remote control 14 is associated with the session that includes the remote control identifier. Server 24 then transmits a message to the indeed recipients (one or more remote controls 14) of the content information (258). In Some examples, server 24 forwards the content information from the first message directly to one or more remote controls 14. In other examples, server 24 may process and/or repackage the content information of the message from

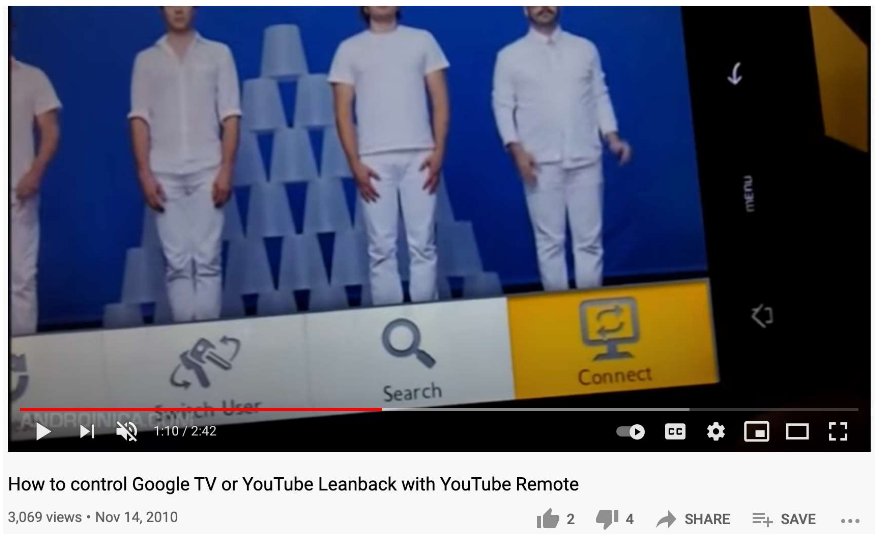
		controlled device 18 into a new message, which can be sent to the intended recipients of the content information. *See e.g.* [9]:  Connected to Leanback screen Now playing from Search: nature photo... Nature Photography - Sandhill Cranes ıe ɜarch: nature photog Recon 02:29 Nature Photography - Sandhill Cranes by wisconsinphotos | 21,091 03:58 Sandhills Journey Byway Podcast 2009 by NebraskaTourism | 2,466 *See e.g.* [10]: “The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers.” *See e.g.* [11]

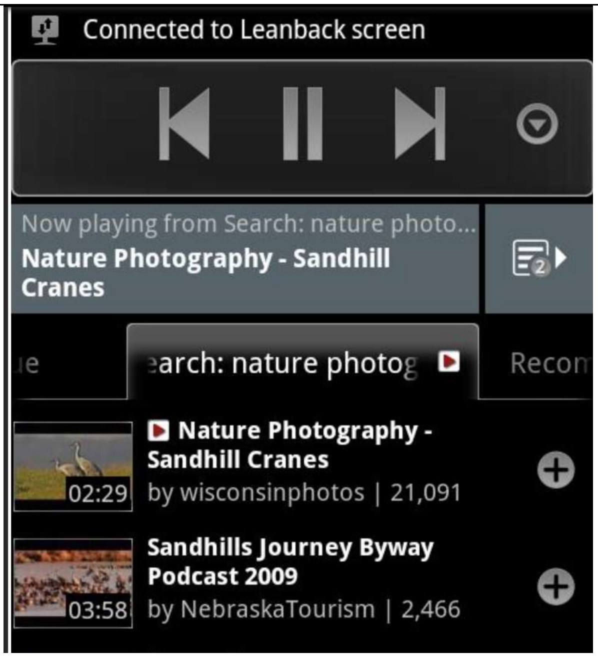
		 **Update**: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy. *See* for example Google source code referenced in elements [1pre]-[1f] above. *See also* for example source code located in subdirectories YTR/src/com/google/android/ytremote, and google3/video/youtube/src/web/javascript/library/tv/, google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ *See also e.g.*: YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote; YTR/src/com/google/android/ytremote/backend/browserchannel; YTR/src/com/google/android/ytremote/backend To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[2]	The computing device of claim 1, wherein the instruction comprises an instruction for the cloud-based computing system associated with the media service to provide the data identifying the next one or more media items to the given	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes the instruction comprising an instruction for the cloud-based computing system associated with the media service to provide the

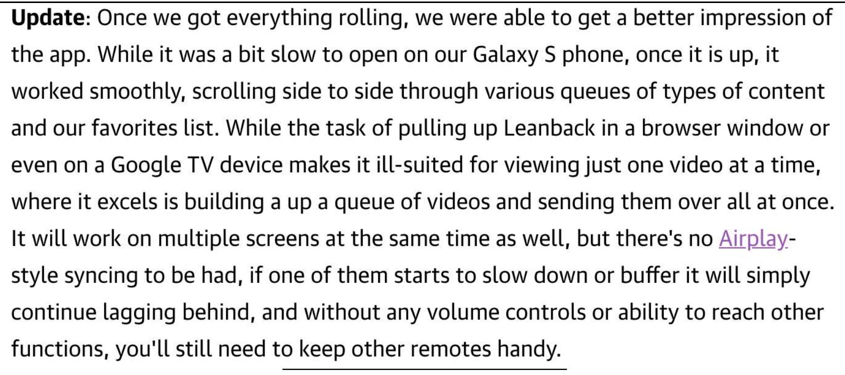
	playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service.	data identifying the next one or more media items to the given playback device for use in retrieving the at least one media item from the cloud-based computing system associated with the cloud-based media service. *See e.g.* [7] Remote to Server, Screen to Server:  **Remote to Server messages** **setPlaylist(videoIds, videoId, currentTime)** ○ videoIds - comma separated video id values representing the current playlist ○ currentTime - playback position in the video in seconds ○ videoId - id of the video currently playing, must be part of the playlist The remote informs the server what its current playlist is. Sent when the remote connects to a screen. If there is no playlist in the session, the playlist sent by the remote will become the current playlist. If there already is one, the playlist will be ignored. The server will also send a request for nowPlaying to the screen. **addVideo(videoId)** **insertVideo(videoId)** **addVideos(videoIds)** **moveVideo(videoId, delta)** **removeVideo(videoId)** **clearPlaylist()** These messages change the current playlist on the server. If a change occurs, the server will send updates to the remotes (via playlistModified) and to the screen (via updatePlaylist).

		 **Screen to Server messages** **nowPlaying(video_id, current_time)** ○ video_id - the encrypted video id of the currently playing video ○ current_time - playback position in the video ○ state - ○ the video player state: unstarted (-1), ended (0), playing (1), paused (2), buffering (3), video cued (5) Leanback informs the server what the currently playing video is.The screen sends this message after any video data change event (such as on next, on previous, or when the next video auto-plays). The server will forward this message to all remotes in the session. If the video_id is not found in the current server playlist, the server will issue a getPlaylist() message to the screen **onStateChange(state)** ○ state - the new video player state: unstarted (-1), ended (0), playing (1), paused (2), buffering (3), video cued (5) Implemented via the our player's JS API, when we receive a onStateChange event we relay that information to the remotes. **confirmPlaylistUpdate(updated)** ○ updated - true/false ; whether the playlist was updated As a response to updatePlaylist, confirms whether the playlist was updated or not; it could be rejected if the playing video is not part of the playlist being sent *See e.g.* [8] at 17:21-43: In some examples, server 24 receives a message from remote control 14 having a remote control identifier and control information (220). For example, the message from remote control 14 may contain an SID issued by servers 24 that identifies remote control 14 as being part of a session. In addition, the message may contain control information intended to alter the operation of one or more controlled devices 18 (e.g., stop playback, begin next payback item, etc.). After receiving the message from remote control 14, server 24 retrieves a controlled device identifier that identifies one or more controlled devices 18 intended to receive the control information (224). For example, server 24 may query a database of stored identification numbers to determine which controlled device is associated with the session that includes the

		remote control identifier. Server 24 then transmits a message to the intended recipients (one or more controlled devices 18) of the control information (228). In some examples, server 24 forward the control information from the first message directly to one or more controlled devices 18. In other examples, server 24 may process and/or repackage the control information of the message from remote control 14 into a new message, which can be sent to the intended recipients of the control information. *See* for example Google source code referenced in elements [1pre]-[1g] above. *See also* for example source code located in subdirectories YTR/src/com/google/android/ytremote/, YTL/browserchannel, YTL/model and YTTV/modules/leanback. YTTVF/youtube/, google3/video/youtube/src/python/, YTTVF/net/browserchannel/, and google3/video/youtube/src/web/javascript/library/tv/, google3/video/youtube/src/web/javascript/library/www/, google3/java/com/google/net/browserchannel/, google3/javascript/closure/net/ *See also e.g.*: YTR/src/com/google/android/ytremote/backend/model; YTR/src/com/google/android/ytremote; YTL/browserchannel; YTL/model; YTTV/modules/leanback. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders I-J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[4a]	The computing device of claim 1, wherein the representation of the one or more playback devices comprises at least one selectable indicator for a group of playback devices that	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes the representation of the one or more playback devices comprises at

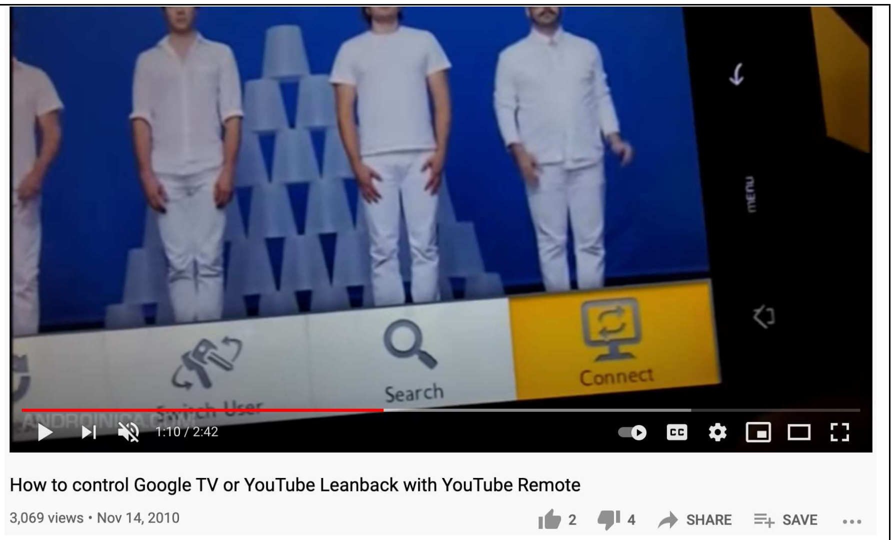
	includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue, and	least one selectable indicator for a group of playback devices that includes the given playback device and one or more other playback devices that are to be configured for synchronous playback of the remote playback queue. *See e.g.* [4]:  How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 2 4 SHARE SAVE *See e.g.* [8] at *17:44-48:* Server 24 may, in some examples, initialize a group session upon receiving the message from remote control 14. For example, server 24 may maintain a session that includes the identifiers for all of the components sending and receiving messages (e.g., remote control(s) 14 and controlled device(s) 18). *See e.g.* [9]:

		 Connected to Leanback screen Now playing from Search: nature photo... Nature Photography - Sandhill Cranes earch: nature photog Recon Nature Photography - Sandhill Cranes 02:29 by wisconsinphotos | 21,091 Sandhills Journey Byway Podcast 2009 03:58 by NebraskaTourism | 2,466 *See e.g.* [10]: "The system even works when the user logs into multiple Leanback browsers; remote control operations are seamlessly sent to all browsers." *See e.g.* [11]:

		 **Update**: Once we got everything rolling, we were able to get a better impression of the app. While it was a bit slow to open on our Galaxy S phone, once it is up, it worked smoothly, scrolling side to side through various queues of types of content and our favorites list. While the task of pulling up Leanback in a browser window or even on a Google TV device makes it ill-suited for viewing just one video at a time, where it excels is building a up a queue of videos and sending them over all at once. It will work on multiple screens at the same time as well, but there's no Airplay-style syncing to be had, if one of them starts to slow down or buffer it will simply continue lagging behind, and without any volume controls or ability to reach other functions, you'll still need to keep other remotes handy. *See* for example Google source code referenced in elements [1pre]-[1f] above. *See also* for example source code located in subdirectories YTR/src/com/google/android/ytremote/, YTL/browserchannel and YTL/model and google3/video/youtube/src/web/javascript/library/www/remote/ *See also e.g.*: YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote; YTL/browserchannel.; YTL/model To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Riders J-K. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[4b]	wherein the user input indicating the selection of at least one given playback device from the one or more playback devices comprises user input indicating a selection of the group of playback devices.	*See* element [4a] above. *See also* for example source code located in subdirectories YTR/src/com/google/android/ytremote/, YTR/src/com/google/android/apps/ytlounge/res/, YTR/src/com/google/android/youtube/ui, and YTR/src/com/google/android/ytremote/backend *See also e.g.*:

		YTR/src/com/google/android/ytremote/adapter;
		
		YTR/src/com/google/android/ytremote;
		
		YTR/src/com/google/android/apps/ytlounge/res/drawable-hdpi; YTR/src/com/google/android/apps/ytlounge/res/drawable-mdpi;
		
		YTR/src/com/google/android/apps/ytlounge/res/drawable;
		
		YTR/src/com/google/android/youtube/ui;
		
		YTR/src/com/google/android/ytremote/backend/browserchannel;
		
		YTR/src/com/google/android/ytremote/backend.

[9]	The computing device of claim 8, wherein the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation.	The disclosures in the independent claim are hereby incorporated by reference. In addition, YT Remote System discloses the transport control operation comprises one of a play operation, a pause operation, a skip forward operation, or a skip back operation. *See e.g.* claim element [1.g] above.
[11]	The computing device of claim 1, wherein displaying the representation of the one or more playback devices comprises: displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred.	The disclosures in independent claim [1] are hereby incorporated by reference. In addition, YT Remote System includes displaying the representation of the one or more playback devices comprises: displaying the representation of the one or more playback devices in response to receiving a selection of a displayed icon indicating that playback responsibility for the remote playback queue can be transferred. *See e.g.* [4]:

		 Switch User Search Connect menu ANDROINICA 1:10 / 2:42 2 4 SHARE SAVE How to control Google TV or YouTube Leanback with YouTube Remote 3,069 views • Nov 14, 2010 *See e.g.* [8] at 4:4-20: According to some examples, the network service may assign each remote control and each controlled device a unique identifier. When pairing devices, the network service may utilize the unique identifier associated with each device to route communication signals properly. For example, the network service may initiate a session that includes each unique identifier of remote controls and controlled devices that are authorized to communicate with each other. The network service can then route messages to members of the session. Any number of remote controls may be paired with a single controlled device and one remote control may be paired to any number of controlled devices. When pairing multiple remote controls and multiple controlled devices associated with a single user, the user may identify a Subset of the remote controls as paired to a subset of the controlled devices, and manage which remote controls control which controlled devices. *See* for example Google source code referenced in elements [1pre]-[1f] above.

		See also for example source code located in subdirectories YTR/src/com/google/android/ytremote/, YTR/res/drawable-mdpi, YTR/res/menu, and YTR/src/com/google/android/ytremote/factory, and google3/video/youtube/src/web/javascript/library/tv/, google3/video/youtube/src/web/javascript/library/www/. *See also e.g.*: YTR/src/com/google/android/ytremote/adapter; YTR/src/com/google/android/ytremote; YTR/src/com/google/android/ytremote; YTR/res/drawable-mdpi; YTR/res/menu; YTR/src/com/google/android/ytremote/factory; YTR/src/com/google/android/ytremote. To the extent it is argued that these references do not disclose this claim element, it would have at least been obvious to combine these references with the references cited in Rider J. Further discussion of the obviousness of this claim element is provided in Google's Invalidity Contentions Cover Pleading.
[12pre]	A non-transitory computer-readable medium having stored thereon program instructions that, when executed by at least one processor, cause a computing device to perform functions comprising:	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1pre] above.
[12a]	operating in a first mode in which the computing device is configured for playback of a remote playback queue provided by a cloud-based computing system associated with a cloud-based media service;	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1a] above.
[12b]	while operating in the first mode, displaying a representation of one or more playback devices in a media playback system that are each i) communicatively coupled to the computing device over a data network and ii) available to accept playback responsibility for the remote playback queue;	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1b] above.
[12c]	while displaying the representation of the one or more playback devices, receiving user input indicating a selection of	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1c] above.

	at least one given playback device from the one or more playback devices;	
[12d]	based on receiving the user input, transmitting an instruction for the at least one given playback device to take over responsibility for playback of the remote playback queue from the computing device, wherein the instruction configures the at least one given playback device to (i) communicate with the cloud-based computing system in order to obtain data identifying a next one or more media items that are in the remote playback queue, (ii) use the obtained data to retrieve at least one media item in the remote playback queue from the cloud-based media service; and (iii) play back the retrieved at least one media item;	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1d] and [1e] above.
[12e]	detecting an indication that playback responsibility for the remote playback queue has been successfully transferred from the computing device to the at least one given playback device; and	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1f] above.
[12f]	after detecting the indication, transitioning from i) the first mode in which the computing device is configured for playback of the remote playback queue to ii) a second mode in which the computing device is configured to control the at least one given playback device's playback of the remote playback queue and the computing device is no longer configured for playback of the remote playback queue.	The disclosures in independent claim [1] are hereby incorporated by reference. *See e.g.* claim element [1g] above.
[13]	The non-transitory computer-readable medium of claim 12, wherein the instruction comprises an instruction for the cloud-based computing system associated with the cloud-based media service to provide the data identifying the next one or more media items to the given playback device for use in obtaining the at least one media item from the cloud-based computing system associated with the cloud-based media service.	*See* claim [2] above.

[16]	The computing device of claim 1, further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising: before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue.	YT Remote System discloses the computing device of claim 1 further comprising program instructions stored on the non-transitory computer-readable medium that, when executed by the at least one processor, cause the computing device to perform functions comprising before displaying the representation of the one or more playback devices, receiving an indication that the one or more playback devices in the media playback system are available to accept playback responsibility for the remote playback queue. *See e.g.* claim element [1b] above.